



# **EH1000H-4 Nano/Nano<sup>+</sup>**

**4/8/16CH Embedded Hybrid DVR**

**Quick User Guide**





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**WARNING**

TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

WARRANTY VOID FOR ANY UNAUTHORIZED PRODUCT MODIFICATION.

**INFORMATION**

For more information, please refer to the user manual in the software CD.



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## I. Package Contents



If there is any damage, shortage or inappropriate item in the package contents, please contact with local dealer

### EH1004H-4 Nano/Nano<sup>+</sup>(4CH)



a.



b.

(1)



(2)



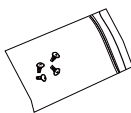
(3)



(4)



(5)



(6)



(7)

(1) DVR unit(4CH)

a. EH1004H-4 Nano    b. EH1004H-4 Nano<sup>+</sup>

(2) Quick Installation Guide

(3) Software CD (Manual is included)

(4) Power adaptor

(5) Power plug (\*The power plug may vary according to the local electricity system.)

(6) Screws for internal HDD installation

(7) Remote Control

### EH1008H-4 Nano/Nano<sup>+</sup>(8CH)



a.



b.

(1)



(2)



(3)



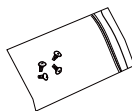
(4)



(5)



(6)



(7)



(8)

(1) DVR unit(8CH)

a. EH1008H-4 Nano    b. EH1008H-4 Nano<sup>+</sup>

(2) Quick Installation Guide

(3) Software CD (Manual is included)

(4) DVI video cable

(5) Power adaptor

(6) Power Plug (\*The power plug may vary according to the local electricity system.)

(7) Screws for internal HDD installation

(8) Remote Control

## EH1116H-4 Nano(16CH)



(1)



(2)



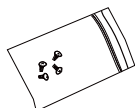
(3)



(4)



(5)



(6)



(7)



(8)

(1) EH1116H-4 Nano

(2) Quick Installation Guide

(3) Software CD (Manual is included)

(4) Power adaptor

(5) Power Plug (\*The power plug may vary according to the local electricity system.)

(6) Screws for internal HDD installation

(7) Remote Control

(8) DVI cable



## II. Hardware Installation

### A. Install the hard disk

User can install 1 SATA hard disks inside the DVR unit.

Follow the illustrated instructions below to install the hard disk:

1. Loosen all screws(2 sides and rear side)
2. Push the cover backward and lift. The cover is a little bit tight, please be carefully the hands.



3. Turn the cover over and place the SATA hard disk (face down) inside the HDD holder.
4. Screw the hard disk(both side)



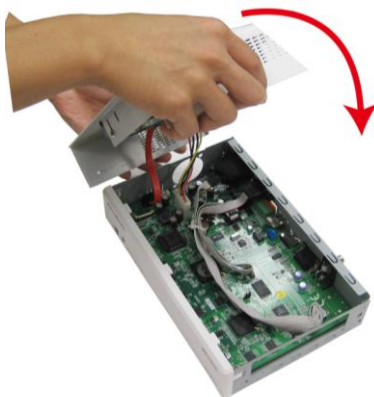
Place the hard disk face down and connector interface of hard disk in this direction.



5. Hold the cover and connect the power cable and SATA cable to the hard disk.



6. And then, turn the cover over carefully.



7. Hold the cover parallel with DVR unit and put the cover back to the DVR unit and be carefully the hard disk that inside the cover.



8. Finally, Push the cover forward and secure the cover



9. You may now connect all the cables and power on the DVR unit.

## B. Device Connection



Pen drive and external hard disk must be FAT32 format.



All connected devices have their own power supply are necessary.

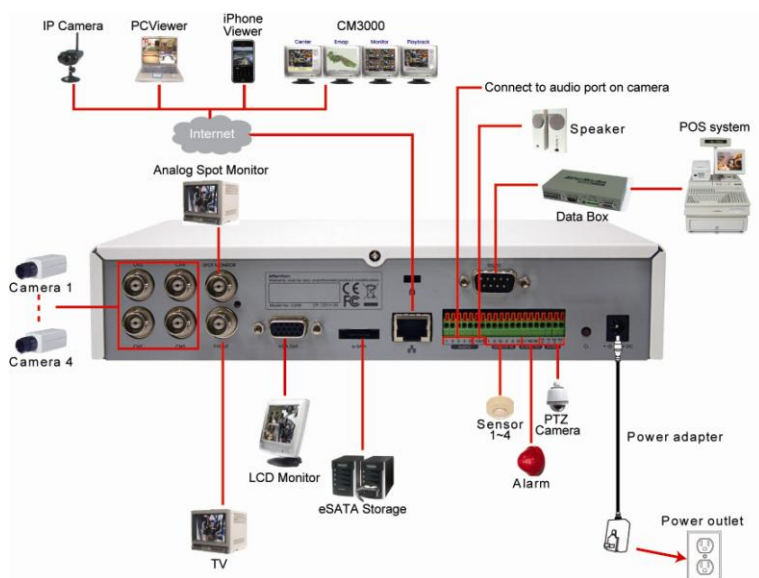
### ■ EH1004H-4 Nano/Nano<sup>+</sup>



- EH1004H-4 Nano/Nano<sup>+</sup> support both Analog and IP camera in 4 channels.
- 1.3 MP with H.264/MPEG4/ MJPEG on the first 4 channels and 2.3MP with MJPEG on the 1st channel for IP cam connection.

The back panel of the EH1004H-4 Nano/Nano<sup>+</sup> user can connect up to 4 cameras in combination of analog and IP camera (EH1004H-4 Nano/Nano<sup>+</sup> supports both analog and IP camera in 4 channels.). The DVR unit also can connect 4 sensor devices, 1 alarm devices, and output video to a LCD monitor.

Follow the illustration below to make the connection:



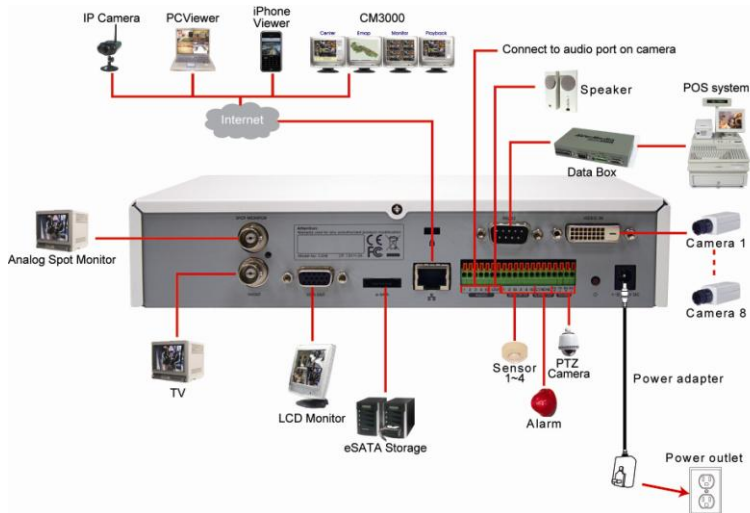
## EH1008H-4 Nano/Nano<sup>+</sup>



- EH1008H-4 Nano/Nano<sup>+</sup> only supports first 4 channels for IP camera connection.
- 1.3 MP with H.264/MPEG4/ MJPEG on the first 4 channels and 2.3MP with MJPEG on the 1st channel for IP cam connection.

The back panel of the EH1008H-4 Nano/Nano<sup>+</sup> user can connect up to 8 cameras in combination of analog and IP camera (EH1008H-4 Nano/Nano<sup>+</sup> only support first 4 channels for IP camera connection). The DVR unit also can connect 4 sensor devices, 1 alarm devices, and output video to a LCD monitor.

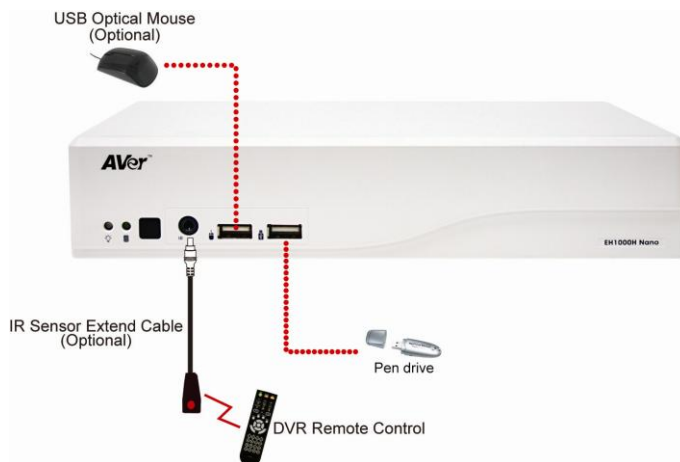
Follow the illustration below to make the connection:



### ■ EH1004H-4 Nano/EH1008H-4 Nano

For backup recorded video, plugging the pen drive or external hard disk through USB port that are located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video.

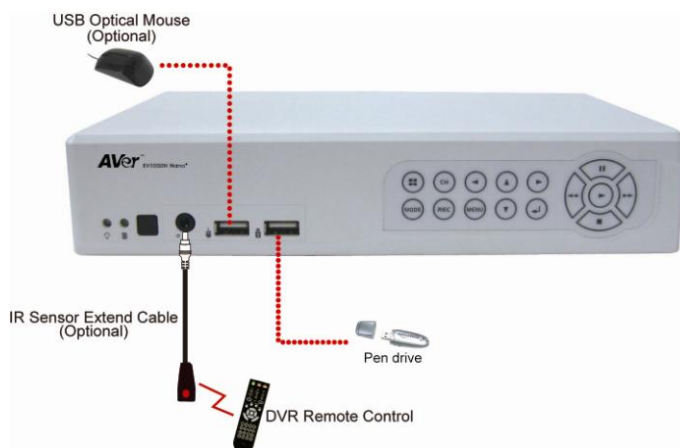
Follow the illustration below to make the connection:



### ■ EH1004H-4 Nano\*/EH1008H-4 Nano\*

For backup recorded video, plugging the pen drive or external hard disk through USB port that are located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video.

Follow the illustration below to make the connection:

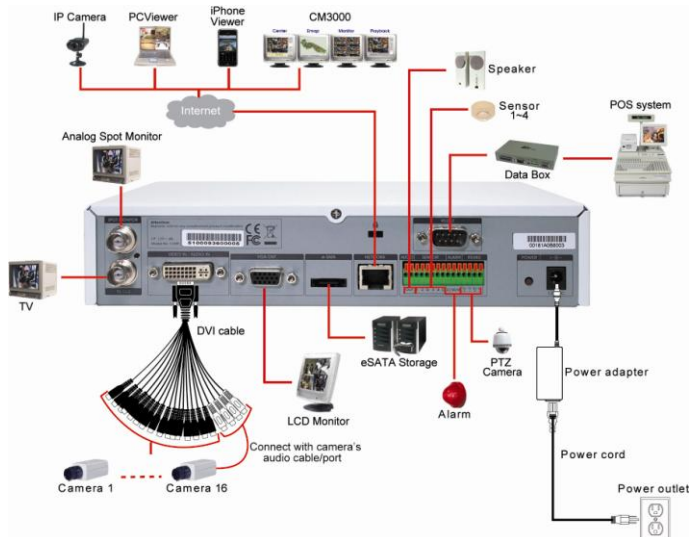


## EH1116H-4 Nano

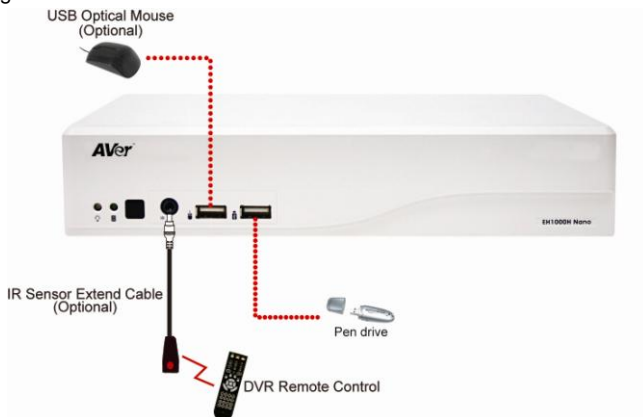


- All connected devices have their own power supply are necessary.
- EH1116H-4 Nano only supports first 4 channels (CH01~04) for IP cameras.

The back panel of the EH1116H-4 Nano user can connect up to 16 cameras in combination of analog and IP camera. The DVR unit also can connect 4 sensor devices, 1 alarm devices, and output video to a LCD monitor.



For backup recorded video, plugging the pen drive or external hard disk through USB port that are located at front panel of DVR unit, and then, use the bundled software enables user to transfer, playback and segment the video. Follow the illustration below to make the connection:



### III. First Time Using the DVR Unit

1. Connect the mouse to DVR unit (through USB port).
2. Connect all necessary external devices.



DVR unit doesn't supply the power to connected external devices.

3. Plug the power to turn on the DVR unit.
4. Please wait for a while until start up process is completed. And then, the preview screen will show up on surveillance screen.



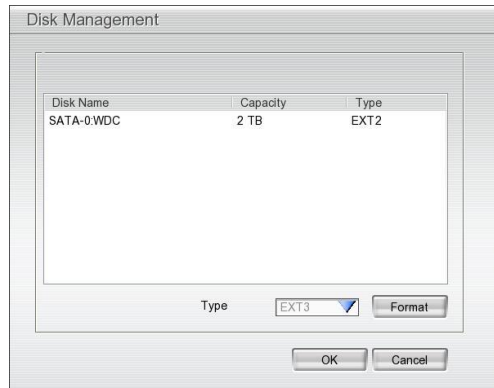
EH1008H-4 Nano/Nano+ Preview UI

5. **Format hard disk:** If the hard disk is first time installed in the DVR unit, please format the hard disk. Following the below steps to format the hard disk.



- Before formatting hard disk, please stop recording.
- While formatting hard disk, the CPU usage will be near to 100% and might slow down the DVR system response.

- a. Click **Setup** and enter the password (If this is the first time, enter the default password [admin]. The default ID will be **admin**).
- b. Click **System** → **Add**



- c. Select the hard disk from list.
  - d. Click **Format** button and click **Start** to begin formatting
  - e. When formatting is done, click **OK**.
6. **Adjust time and date:** Setup the DVR system date and time in order to have corrected recording time and date. Following the below steps to setup date and time:
- a. Click **Setup** and enter the password (If this is the first time, enter the default password "**admin**"). The default ID will be "**admin**").
  - b. Select **System**.
  - c. In **Date and Time Setting**, click **Setting** button of **System Date and Time**.
  - d. Select the Year and Month by click arrow button, click on the date to select the date. And adjust the time, and then, click **OK**.
7. **Connecting the cameras:** DVR supports IP and Analog camera.
- **Analog camera**
    - a. Plug the video cable which included in package contents to audio port on DVR unit.
    - b. Connect the analog camera video cable to video-in port.
    - c. Click **Setup** → **Camera**
    - d. Select camera channel and mark **Enable** to enable the channel.
    - e. Select **Input** as Analog Camera.
    - f. In **Camera** section, mark **Display** to allow the live video of camera to display on surveillance screen. And then, enter the **Name** and **Description** of the channel.
    - g. **Enable Audio:** select the audio input channel. Mark **Enable Audio** to record the sound. For example: The camera 1 is connected with audio channel 2, then, user needs to select audio channel 2 as camera 1's audio channel (audio connection refer to **Device Connecting** section).
    - h. Adjust the bright, contrast, hue, and saturation of the camera.
    - i. Click **OK**.

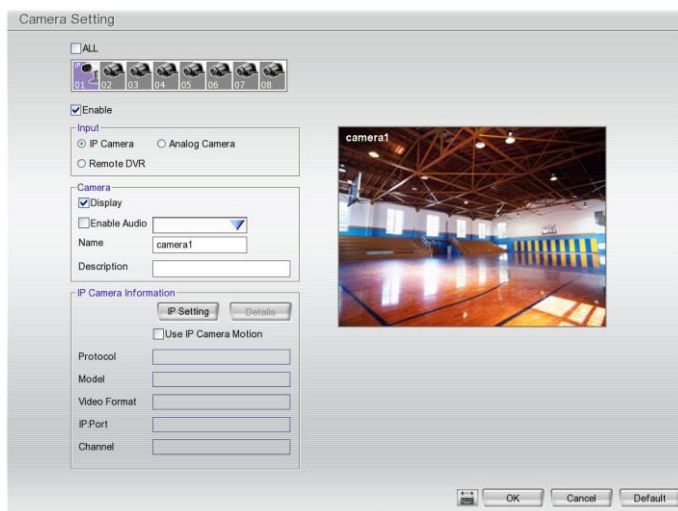


## ■ IP camera



- EH1008H-4 Nano/Nano<sup>+</sup> and EH1116H-4 Nano only supports first 4 channels (CH1~4) for IP camera.
- EH1004H-4 Nano/Nano<sup>+</sup> supports both analog and IP camera in 4 channels.
- 1.3 MP with H.264/MPEG4/ MJPEG on the first 4 channels and 2.3MP with MJPEG on the 1st channel for IP cam connection.

- a. Click **Setup** → **Camera**.



- b. Select camera channel (1~4) and mark **Enable** to enable the channel.
- c. Select **Input** as IP Camera.
- d. In **Camera** section, mark **Display** to allow the live video of camera to display on surveillance screen. And then, enter the **Name** and **Description** of the channel.
- e. In **Camera Information** section, click **IP Setting** for detail setting.

- f. In IP Camera Setting window, click **Protocol** radio button, then, select **Protocol**, **Mode**, and **Video Format**. User also can click **Auto Search** button to find the IP cameras that can be detected on your LAN network.
- g. Enter IP address in **IP Camera site** column or enter the **URL** of IP camera.
- h. Enable **Authentication** and enter **ID** and **password** if IP camera's access authority is required.
- i. Click **OK** to save the setting.
- j. When the IP camera has connected, user should see the camera information of **Protocol**, **Model**, **Video Format**, **IP port**, and **Channel**.
- k. To connect another IP camera, follow the above steps.

#### IV. Recording the Live Video

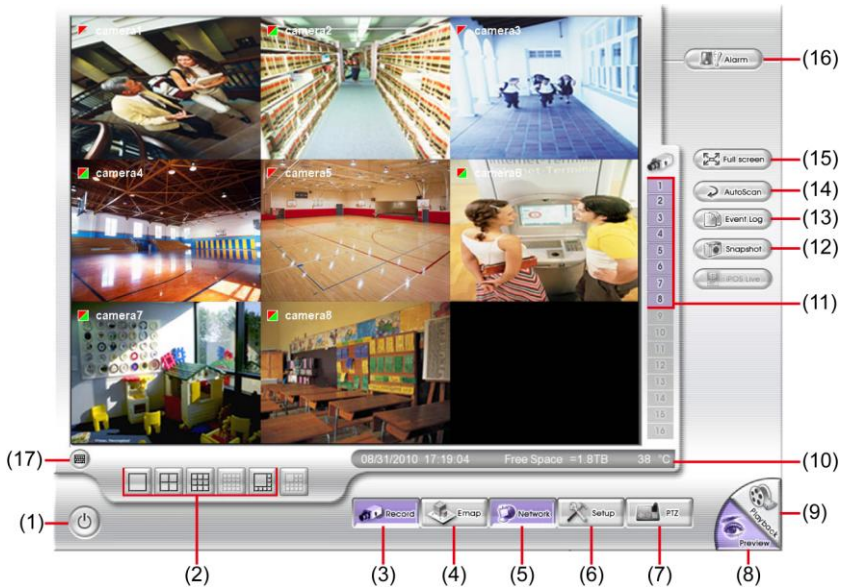
While monitoring, user can click **Record** (  ) button to save the live video on hard disk and recorded video can playback in local site.

To stop recording, press **Record** button again and enter the authentication password.



EH1008H-4 Nano/Nano+ Preview UI

## V. Familiarizing the Buttons in Preview Mode



EH1008H-4 Nano/Nano+ Preview UI

Name	Function
(1) Logout	<ul style="list-style-type: none"> <li>- <b>Reboot:</b> To restart the DVR system. It is required to enter the password</li> <li>- <b>Power Off:</b> To shut down the DVR system. It is required to enter the password</li> <li>- <b>Login:</b> Using different ID to login to DVR system.</li> <li>- <b>Cancel:</b> To return to DVR application.</li> </ul> <div data-bbox="373 1036 793 1177"> <p>Logout</p> <p>User <input type="text" value="admin"/></p> <p>Reboot Power OFF Login Cancel</p> </div>
(2) Split Screen Mode	Select from four (4) different split screen types to view all the camera, or one camera over the other or alongside on a single screen. It also allows you to switch and view different camera number.
<b>i</b>	<ul style="list-style-type: none"> <li>- When you are in single screen mode, <b>Right click</b> and <b>Drag</b> a square on the area you want to enlarge. Right-click on screen again, the screen view will back to normal view.</li> <li>- When you are in full screen mode, partial enlarges does not support.</li> </ul>
(3) Record	Start/stop video recording.

Name	Function
(4) EMap	Display the map in each area, and the location of camera/ sensor/ relay and the warning.
(5) Network	Enable/disable remote system access. This feature allows you to access DVR server from a remote location via internet connection. The default is disabled.
(6) Setup	Configure the system settings.
(7) PTZ	Access PTZ control panel.
(8) Preview	Switch to Preview mode. This allows you to view live camera display.
(9) Playback	Switch to Playback mode. This allows you to view the recorded video file.
(10) Status bar	Display the current date, time, hard disk free space and temperature of unit.
(11) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(12) Snapshot	Capture and save the screen shot in *.jpg format.



Please plug the USB pen drive to DVR server before press **Snapshot** button.

(13) Event log	Show the record of activities that take place in the system.
(14) AutoScan	Start/Stop video screen cycle switch.
(15) Full screen	View in full screen. To return, press the right button of the mouse or <b>ESC</b> on the keyboard or click the arrow icon.



When you switch to full screen in multiple-screen mode, **Left** click to toggle to only display one of the video in the multiple-screen mode or all.

(16) Alarm	Alert and display warning info.
(17) Virtual	Click to enable virtual keyboard.

Name	Function
Keyboard	

## VI. Playback Recoded Video

1. In preview mode, click the **Playback** button.



EH1008H-4 Nano/Nano+ Preview UI

2. In Time and Date Selection window, select the date and time to playback. The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 08 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.
3. After selected the date and time, click **OK** to start playback. User will see the selected video file playback on the screen.



Playback Mode




## VII. Familiarizing the Buttons in Playback Mode


To switch in Playback mode, click **Playback** button at the lower right corner of Preview mode.



EH1008H-4 Nano/Nano+ Playback UI

Name	Function
(1) Split Screen Mode	Select from 4 different split screen type to playback the recorded video file of all the camera, or one camera over the other or alongside on a single screen.
(2) Progress bar	Show the progress of the file being played. You may move the bar to seek at any location of the track.
(3) Hour Buttons	Select and click to playback the recorded video file on the specific time frame.
	The Hour buttons represent the time in 24-hour clock. The blue bar on top of the hour button indicates that there is a recorded video file on that period of time. While the red bar indicates that you are currently viewing the recorded video file.
(4) Playback Control Buttons	<p><b>Begin:</b> Move at the beginning of the recorded video file.</p> <p><b>Previous:</b> Go back to the previous frame.</p> <p><b>Slower:</b> Play the recorded video file at the reduce speed from 64x, 32x, 16x, 8x, 4x, 2x, 1x, 1/2X, 1/4X.</p> <p><b>Rewind:</b> Wind back the recorded video file.</p> <p><b>Pause:</b> Briefly stop playing the recorded video file.</p> <p><b>Play:</b> Play the recorded video file.</p>



Name	Function
(4) Playback Control Buttons	<p><b>Faster:</b> Play the recorded video file at the speed of 2x, 4x, 8x, 16x, 32x or 64x.</p> <p><b>Next:</b> Go to the next frame.</p> <p><b>End:</b> Go to the end of the recorded video file.</p>
(5) Date	Select the date on the calendar and the time from 00 to 23 to where to start playing the recorded video file.
	The numbers from 00 to 23 represent the time in 24-hour clock. The numbers from 01 to 04 or 08 represent the camera ID. The blue colored column indicates that there is a recorded video file on that period of time. While the red colored column indicates on where to start playing the recorded video file.
(6) Preview	Switch to Preview mode.
(7) Playback	Switch to Playback mode to view the recorded video file.
(8) Status bar	Display the recorded date, time and play speed.
(9) Camera ID	Show the number of cameras that are being viewed. When you are in single screen mode, click the camera ID number to switch and view other camera.
(10) Export	<p>Export includes Snapshot, Output Video Clip, and Backup function.</p> <ul style="list-style-type: none"> <li>■ <b>Snapshot:</b> Capture and save the screen shot in *.jpg format.</li> <li>■ <b>Output Video Clip:</b> Save the segmented file in *.dvr format to external USB storage device.</li> <li>■ <b>Backup:</b> Save the playback file to USB device or DVD disk</li> </ul>
(11) Segment	<p>Keep a portion of the recorded video.</p> <ol style="list-style-type: none"> <li>1. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to start the cut. Then, click <b>Segment</b> to set the begin mark.</li> <li>2. Use the Playback Control buttons or drag the bar on the playback progress bar and pause on where you want to end the cut. Then, click <b>Segment</b> to set the end mark. To cancel segmentation or set the segment marks from the start, click <b>Segment</b> button again.</li> <li>3. Click <b>Export</b> button → <b>Output Video Clip</b> to save the video segment to the USB storage device.</li> </ol>
(12) Full screen	<p>View in full screen. To return, press the right button of the mouse or <b>ESC</b> on the keyboard or click the arrow icon.</p> <p>When you switch to full screen in multiple-screen mode, <b>Left</b> click to toggle to only display one of the video in the multiple-screen mode or all.</p>
(13) Event log	Show the record of activities that take place in the system. To filter the records, select and click the option button to only display Event, System, Operation, Network or All.

Name	Function
(14) Bookmark	<p>Mark a reference point when reviewing the recorded video file to which you may return for later reference.</p> <ol style="list-style-type: none"> <li>1. Click <b>Bookmark</b> button</li> <li>2. In the Bookmark dialog box, you may do the following: <ul style="list-style-type: none"> <li>- <b>Add</b> to create the new reference mark in the bookmark list.</li> <li>- <b>Edit</b> to change the mark description.</li> <li>- <b>Delete</b> to remove the selected reference mark in the list.</li> <li>- <b>Delete All</b> to remove all the reference marks in the list.</li> <li>- <b>Exit</b> to close Bookmark dialog box.</li> </ul> </li> <li>3. Select and click one in the bookmark list to review the file.</li> </ol>
(15) Find Next	Search for the next event or changes in the motion detector frame. You can use this when you are using Event Search function.
(16) Event Search	Search from the recorded activities that were recorded in event log (i.e., Sensor, Motion, Video Loss).
(17) De-interlace	To enhance the video quality. Set the de-interlace mode to #1, if you are capturing motionless picture and #2, if it captures lots of movement.



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